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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,337	02/09/2004	Yoshiya Tomatsu	118595	8913
25944	7590	05/04/2005	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			HOANG, TU BA	
			ART UNIT	PAPER NUMBER
			3742	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/773,337	Applicant(s) TOMATSU, YOSHIYA	
	Examiner Tu Ba Hoang	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 24-31 is/are allowed.
- 6) ☒ Claim(s) 9-11, 13-17, 19-23, 32-34, 36, 37, 39, 40, 42, 43 and 45-47 is/are rejected.
- 7) ☒ Claim(s) 12, 18, 35, 38, 41 and 44 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/09/04</u> . | 6) <input type="checkbox"/> Other: ____. |

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 21, 23, and 45-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21, there are insufficient antecedent bases for "the switch" recited at line 2, "the fixation medium" recited at line 3, and "the supporting member" recited at line 4 in the claim or from the preceding claim.

In claim 23, there is insufficient antecedent basis for "the switch" recited at line 3 in the claim or from the preceding claim.

In claims 45 and 46, there is insufficient antecedent basis for "the switch" recited at lines 2-3 in the claim or from the preceding claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 47 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Naoki et al (JP3209883) cited by the Applicant. Naoki et al (JP'883) shows all features of the claimed invention including a thermal fixing device (Figures 1(a)-(b) and Figure 2) comprising a fixing member or heat roller 2 disposed to be in contact with a fixation medium 15 (shown in Figure 3), a heating unit or halogen lamp 5 configured to heat the fixing roller 2 with power supplied thereto, a supporting unit having bearing 20 and spring 13 which is configured to movably support the fixing member 2 and to move the fixing member 2 when the fixing member is overheated by the heating unit 5 (i.e., as the surface temperature of the fixing member 2 is abnormal, the bearing 20 begins to be melted and moves the member 2 to locations shown in Figures 1(a) to 1(b)), and a switch or thermostat 10 disposed to be in contact with the fixing member 2 when the fixing member is moved by the supporting unit (i.e., as the bearing 20 begins to be melted by the heat of the surface of the fixing member 20 and moves the member 2 to the thermostat 10 side and comes in contact with the thermostat 10 as shown in Figure 1(b)) and configured to mechanically cut off the power 8 supplied to the heating unit or lamp 5 when the switch or thermostat 10 contacts with the fixing member 2.

Claim 47 is further rejected under 35 U.S.C. 102(b) as being clearly anticipated by Masahiro (JP8-297430) cited by the Applicant. Masahiro (JP'430) shows all features of the claimed invention including a thermal fixing device (Figures 1(a)-(b) and Figure 5) comprising a fixing member 1 disposed to be in contact with a fixation medium (i.e., between rollers 1 and 2), a heating unit 4 configured to heat the fixing roller 1 with power (AC shown in Figure 5) supplied thereto, a supporting unit or bearing 5 which is

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configured to movably support the fixing member 1 and to move the fixing member 1 when the fixing member is overheated by the heating unit 4, and a switching means 13 disposed to be in contact with the fixing member 1 when the fixing member is moved by the supporting unit 5 and configured to mechanically cut off the power supplied to the heating unit 4 when the switching means 13 contacts with the fixing member 1 with the switch arm 14.

Claims 9-11, 13-17, 19-20, 22-23, 32-34, 36-37, 39-40, 42-43, and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Yasuhiro et al (JP9-114317). Yasuhiro et al shows all features of the claimed invention including an image forming apparatus such as copy machine shown in Figure 4 which comprises a sheet feeding section 109 for feeding sheet 108, an image forming section 102,103 which includes a thermal fixing device and inherently, at least a supporting unit or bearing for fixing rollers or members, wherein the fixing device comprises a fixing member 101, a pressing member 107, a heating unit 104, and a thermal cutoff unit 120 or 110 (also see Figures 1(a), 2(a)) which comprises a bimetal 3 or 113 that is deformed by heat and exposed toward the fixing member 101 to be in contact therewith without intermediary of air for cutting off the power supplied to the heating unit 104 and a housing 1,2,4 (as shown in Figures 1-2), the bimetal 3 or 113 further comprises a projection 6 or 116 to be in contact with the fixing member through a heat conductive member 5 having a high thermal conductivity which is in contact with the fixation area 4a of the fixing member 101, the housing also contains the heat conductive member 5 and a switch 8,9, wherein the heat conductive member is also configured to become in non-contact with the fixing member when the fixing member is not overheated.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Sakata (US 5,420,392) and Wang (US 6,617,951).

Claims 1-8 and 24-31 are allowed.

Claim 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 12, 18, 35, 38, 41, and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

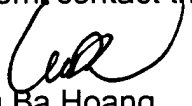
The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or fairly suggest the use of a supporting unit for moving the fixing member when the fixing member is overheated (claims 1, 12, 18, 35, 41) in a combination with a thermal cutoff unit having a bimetal and a switch to be in contact with the fixing member for mechanically cutting off the power supplied to the fixing member heating unit as recited in claims 1 and 24 and wherein the supporting unit also comprises a bearing member which is softened by the overheat to allow a pressing member to move the fixing member (as recited in claims 21, 38, and 44).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (571) 272-4780. The examiner can normally be reached on Mon-fri from 8:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang
Primary Examiner
Art Unit 3742

April 26, 2005